CERTIFICATION OF TRANSLATION

I, Elise Duvekot, a citizen of the United States of America, hereby certify that I am fully familiar with the German and English languages and that I am capable of translating from German into English. To the best of my knowledge and ability, the foregoing pages constitute an accurate and complete translation of the copy before me in the German language of the following:
the Priority Certificate on the filing of German Patent Application No. 102 38 342.1 titled "Verfahren zum Befördern von Postsendungen und Paketfachanlage ".

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true.

In witness whereof I sign,

January 17, 2005
Date

Elise Duvekot
Signature of translator

Öffentlich bestellte und beeidigte Urkundenübersetzerin und Dolmetscherin der englischen Sprache für Baden-Württemberg
Elise Duvekot

Translation by: **Duvekot Translators**
Park Oud Wassenaar 1-52
2243 BX Wassenaar
The Netherlands
Phone: (+31) 70 – 511-2999
Fax: (+31) 70 – 511-2870
e-mail: LEDTRANS@CS.COM

TRANSLATION

THE FEDERAL REPUBLIC OF GERMANY

Priority Certificate on the Filing of a Patent Application

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Applicant/Proprietor:	Deutsche Post AG, Bonn, Germany (DE)
Title:	Method for the conveyance of postal items
IPC:	G 06 F, B 07 C

The appended documents are a true and precise reproduction of the original documentation of this patent application.

Munich, September 4, 2003
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METHOD FOR THE CONVEYANCE OF POSTAL ITEMS AND PACKAGE MAILBOX

The invention relates to a method for the conveyance of postal items.

A method of this type is known from French patent application FR 2 563 987. In this prior-art method, mailpieces are transported to an electronic parcel compartment system. The recipients of the mailpiece can identify themselves as being authorized recipients at the electronic parcel compartment system and they can then remove the parcel.

The invention is based on the objective of further developing the prior-art method in such a way that a better utilization of the capacities of the electronic parcel compartment system is achieved.

According to the invention, this objective is achieved in that, when a mailpiece is deposited, the electronic parcel compartment system records identification information that identifies the mailpiece and/or it generates said identification information, and in that, during subsequent processing steps of the mailpieces, the identification information is recorded and/or recorded and evaluated in a data processing component that stores transport data.

The execution according to the invention of the method, or the configuration according to the invention of the electronic parcel compartment system, make it possible to use the electronic parcel compartment system to accept mailpieces and to subsequently forward the mailpieces to recipients outside of the service area of the electronic parcel compartment system.

This means in particular that the electronic parcel compartment system can be used for dispensing mailpieces as well as for receiving mailpieces. In this manner, storage capacities of the electronic parcel compartment system as well as the transportation space in means of transportation such as, for example, vehicles, are used more effectively for the conveyance of the mailpieces.

Preferably, a deliverer removes mailpieces from the electronic parcel compartment system that are there temporarily and that are intended for further transport within a logistic system and said deliverer then deposits mailpieces into the electronic parcel compartment system that can subsequently be picked up by users of the electronic parcel compartment system in the area of the electronic parcel compartment system.

Preferably, the invention allows the most flexible possible filling of the compartments as well as the utilization of the fact that the available storage capacity of the electronic parcel compartment system is increased in that mailpieces meant for further transport in the logistic system have been removed.

An especially preferred embodiment of the invention is characterized in that the identification information is recorded when the mailpiece is deposited as well as when the mailpiece is removed from the electronic parcel compartment system.

Fraudulent use of the electronic parcel compartment system is prevented in that only mailpieces that have been properly recorded are forwarded to a subsequent conveyance cycle.

In an especially preferred embodiment of the invention, before being delivered to the parcel compartment system, all of the mailpieces already have the identification code and/or the address sticker. This is especially the case with returned items.

An especially preferred embodiment of the invention is characterized in that the same means can be used for the transmission of the event information about the delivery and/or pick-up of mailpieces that can also be used for the transmission of the identification information.

Both variants entail specific advantages. For example, the shared transmission of the information about the pick-up or the delivery of the mailpieces and the simultaneous transmission of the identification information allows comprehensive shipment tracking.

A combination of the various transmission means results in the highest possible assurance of payment for the shipping company that operates the logistic system as well as in the most comprehensive possible shipment tracking.

Moreover, a combination is suitable for returned items as well as for already franked shipments such as, for example, prepaid parcel products. It is also possible to establish and utilize a separate parcel stamp for the delivery of parcels to electronic parcel compartment systems or to adapt the current payment model of the freeway parcel stamp so as to attain a purely size-dependent scale.

Preference is given to the acceptance of franked mailings, especially since the service at the machine can be completed relatively quickly in this case. The customer merely has to scan the label into the machine.

It is especially advantageous if the customer with the parcel acceptance function has the possibility to select a sender within the Deutsche Post World Net corporation. For example, after the shipment has been properly deposited, the customer can preferably choose between several types of delivery. Here, for instance, a *'normal delivery'* and an *'express delivery'* can be available as choices. If the customer selects *'express delivery'*, he might then be requested to pay an appropriate additional amount by means of an EC card or money card. The procedure in the case of an express delivery can then, for example, be that the electronic parcel compartment system triggers a notification (by SMS or e-mail) with the necessary information (where the shipment can be picked up, by when the shipment has to be delivered where, ...) to the logistic company. Consequently, with the modality of express deliveries, a prompt pick-up of the shipment can be ensured.

Additional advantages, special features and practical refinements of the invention are found in the subordinate claims and in the description below of preferred embodiments, making reference to the drawings.

The drawings show the following:

Figure 1 a block diagram with an especially preferred acceptance modality of parcels with an Identcode,

Figure 2 a block diagram with an especially preferred acceptance modality of parcels with a specific Identcode, and

Figure 3 a block diagram with an especially preferred acceptance modality of parcels and packages.

Franking of shipments

If only franked shipments can be accepted at the machine, then they have to be sufficiently franked.

Numerous senders enclose return labels, including return codes, with their shipments. Return codes are separate sets of numbers that are assigned only to returns. The transport costs for return codes are invoiced by the Deutsche Post subsequently (that is to say, after the recipient has sent the shipment back to the sender).

The sender - depending on the goods management system or customer administration system - associates the return codes to the order. This means that, by knowing the return code, the sender can identify the shipment or the possible contents of the returned items.

The sets of numbers of the Identcodes and return codes of business customers of the Deutsche Post are stored in a central database. A link to this database allows the Identcodes or return codes to be checked. If the return codes are known in the system, they can easily be forwarded to the sender. Thus, for example, the additional service "notification of the returns" could be offered to the senders.

Sending parcels

a) ELECTRONIC PARCEL COMPARTMENT SYSTEM variant

The shipment has to have an Identcode. The Identcode is scanned into the machine and checked on the basis of the

check digit logic. If the Identcode is correct, the shipment can be accepted. If the scanned code is not correct or if it is not an Identcode, then the placement of the shipment is refused.

In an especially preferred embodiment of the invention, not only the Identcode but also a routing code (Leitcode) that is applied onto the shipment is checked. Here, the routing code is advantageously checked for the number of digits, hash value and for specific return product codes that constitute part of the routing code. This increases the security in the checking of return shipments and the customer is requested, for example, to scan both barcodes on his return sticker.

b) New parcel stamp

A conceivable further refinement for the acceptance of parcels is the acceptance of shipments with certain Identcodes and routing codes (or return codes) that can be checked by the electronic parcel compartment system. For example, in a manner similar to the freeway stamp, there could be an PARCEL COMPARTMENT SYSTEM *STAMP* - one price for all parcels or a price scale on the basis of the compartment size - that would no longer be calculated as a function of the size and weight.

Each *FREEWAY STAMP* contains an Identcode. The sets of numbers used for each label (S, M, L, XL, F) are related directly to the size of the compartment (S, M, L, XL). If an Identcode of a *FREEWAY STAMP S* parcel stamp is scanned in, only a small compartment opens. If all of the small compartments are occupied, then the next larger compartment opens as needed.

Acceptance of parcels with an Identcode

A block diagram depicting an especially preferred acceptance modality for parcels with an Identcode is shown in Figure 1. Only parcels - that is to say, shipments for which verification of the identity is required - are accepted in the electronic parcel compartment system. A correct Identcode and routing code are needed to open the compartment.

Especially preferred embodiments:

- logic for IDC check
- logic for routing code check including product check
- set-up of a scanning process in the machine that is reliable and simple for the customer
- simple, self-explanatory or intuitive machine operation

Sequence:

1. The LogIn procedure is successfully completed by the customer.
2. The user chooses in the menu between 'remove parcel' (only appears if the user has parcels in the machine) and 'deposit parcel' (only appears if compartments are free and if the user is authorized to deposit parcels)
3. The user chooses 'deposit parcel' and is prompted to scan in the two barcodes (Identcode and routing code) of his shipment. (If the scanning fails, it is preferable if manual entry is possible.)
4. Both codes (Identcode and routing code) are checked on the basis of the check digit.
5. If the codes are correct, the user is optionally asked about the type of delivery.

6. The user is prompted to select a compartment size.
7. After selection of the size, an appropriate compartment is opened.
8. The user deposits the parcel and closes the door.
9. The machine prints a receipt (information: postal number; number of the electronic parcel compartment system; date and time of day; IDC; compartment number; logistic provider).
10. The user removes the receipt.
11. The parcel data (see 9.) is forwarded to the Post24 System. From there, the information of the logistic provider can be initiated, if applicable.

Acceptance of parcels with an Identcode

Risks

- shipments might be insufficiently franked
- shipments might be incorrectly addressed
- different shipments from what the scanned-in codes (Identcode and routing codes) would lead to expect might be deposited (e.g. shipments without IDC)
- final customers might not be good at handling scanners

Various embodiments for the electronic parcel compartment system

In addition to the DPWN customer model, other embodiments are also conceivable. In the embodiment of the DPWN, it is necessary to identify the recipient. Over a certain period of time, the Deutsche Post has to be able to substantiate to whom which shipment was given (only with shipments for which verification of the identity is required).

Requirements

DPWN customer model

Existing concept for customer-specific depositing and picking up of goods in and at electronic parcel compartment systems.

Here, the unambiguous identification of each parcel recipient is important. Each user who can pick up parcels has to be registered. For this purpose, the postal address is verified by means of an address check and the identity of the customer is verified on the basis of the PostPIN received by registered letter. In this manner, all customer data is verified. Unverifiable customers are not accepted.

Shipments are only deposited for (known and registered) recipients.

It is especially advantageous for the deliverer to indicate the postal number when the shipment is deposited since this allows a notification to be sent to the recipient.

At the machine, the user identifies himself with his postal number and his PostPIN. In this way, the electronic parcel compartment system knows who the person picking up each parcel is.

Prerequisites

- address has been checked
- customer identity has been verified
- customer is registered
- shipment is addressed to customer (with postal number)
- shipment was deposited into the machine correctly
- customer login to the electronic parcel compartment system was concluded successfully

Sequence

1. The address contains the postal number of the recipient.
2. The deliverer deposits the shipment, indicating the postal number.
3. On the basis of the recipient identity, the notification can be initiated.
4. The customer logs in at the machine with his postal number (gold card).
5. He identifies himself by entering his PostPIN.
6. If the checking of the postal number / PostPIN combination is successful, the customer can use the electronic parcel compartment system. If the combination is not correct, the customer is refused access.

Claims:

1. A method for the conveyance of a mailpiece, whereby an identification code is assigned to the mailpiece,
characterized in that
the mailpiece is delivered to a compartment of an electronic parcel compartment system, in that the identification number of the postal mailpiece is recorded and stored in the electronic parcel compartment system and/or in a central database.

2. The method according to Claim 1,
characterized in that
the depositing of the mailpiece into the electronic parcel compartment system is recorded in a data processing unit that stores transport data.

3. The method according to Claim 2,
characterized in that
the data processing unit that stores transport data sends a digital notification message for the parcel to be picked up.

4. The method according to Claim 3,
characterized in that
the notification message and/or the identification code contain information about the transport of the mailpiece and in that the transport of the mailpiece is effectuated at least partially on the basis of this information.

5. The method according to one or more of the preceding claims,
characterized in that,

in the area of the electronic parcel compartment system, a payment checking procedure is carried out and in that an access possibility for depositing a parcel and/or a closure mechanism for the parcel compartment are only activated if the payment checking procedure has confirmed the presence of a monetary amount and/or of monetary information in a predefinable amount.

6. The method according to Claim 5,
characterized in that
the identification code contains the monetary information.

7. The method according to one or more of Claims 5 or 6,
characterized in that
the payment to be made is selected as a function of the size of the parcel compartment.

8. A method for the conveyance of mailpieces using an electronic parcel compartment system,
characterized in that,
when the mailpiece is deposited, the electronic parcel compartment system records identification information that identifies the mailpiece and/or it generates said identification information, and in that, during subsequent processing steps of the mailpieces, the identification information is recorded and/or evaluated in a data processing unit that stores transport data.

9. The method according to Claim 8,
characterized in that
the identification information can be recorded when the mailpiece is deposited as well as when the mailpiece is removed from the parcel compartment system by the deliverer.

10. An electronic parcel compartment system,
characterized in that
it comprises means to record an identification code for mailpieces and to subsequently transmit the identification code to a data processing unit that stores transport data.

11. The electronic parcel compartment system according to Claim 10,
characterized in that
the electronic parcel compartment system transmits information about the depositing and/or picking up of mailpieces to a data processing unit that stores transport data.

Abstract:

The invention relates to a method for the conveyance of a postal item, whereby an identification code is assigned to the postal item. Said method is characterised in that the postal item is delivered to a box of an electronic package mailbox, the identification number of the postal item is recorded and stored in the electronic package mailbox and/or a central databank. The invention further relates to an electronic package mailbox, which comprises the means for recording an identification code for postal items and for subsequent transmission of the identification code to a data processing unit for storage of transport data.

Acceptance of parcels with an Identcode

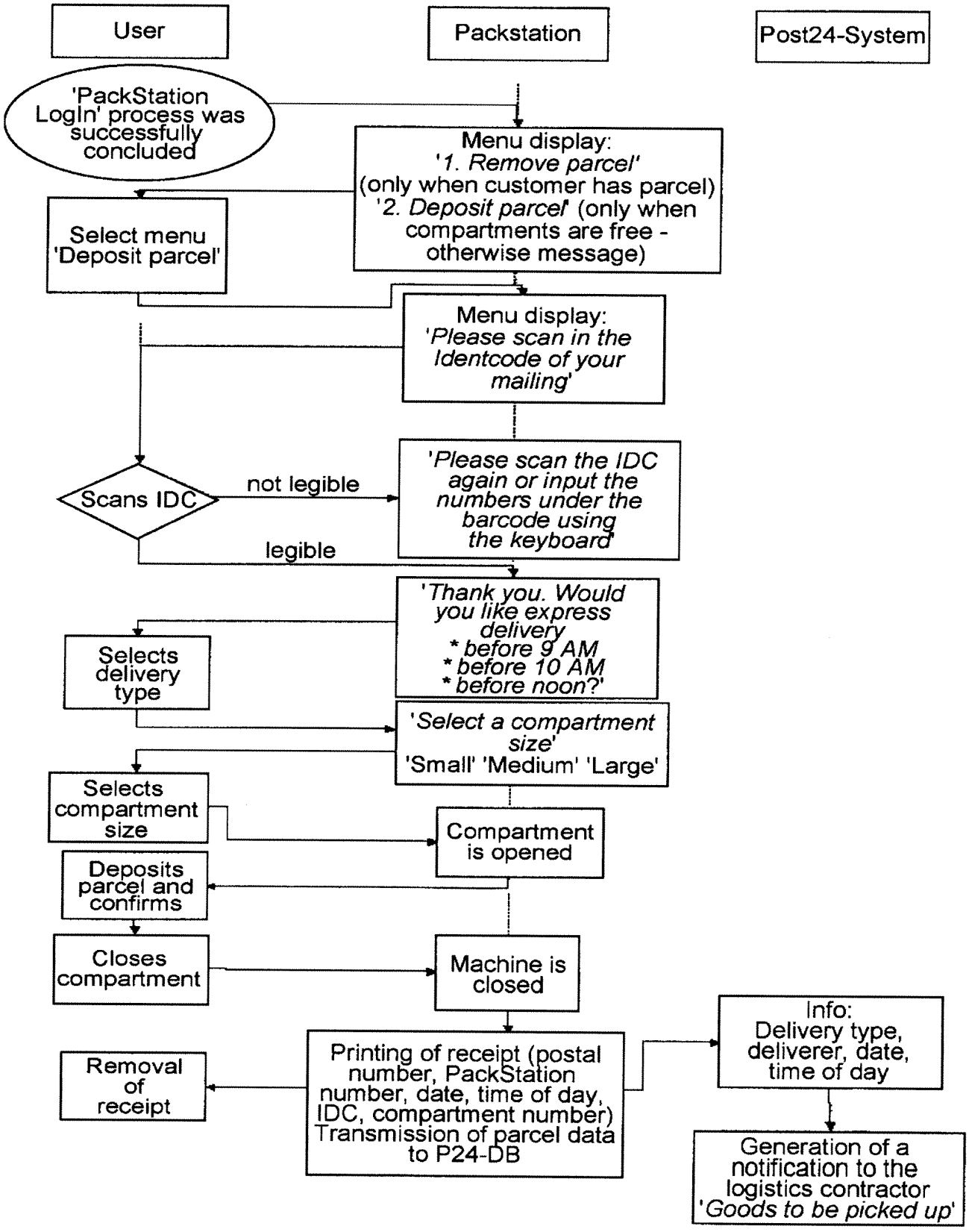

Fig. 1

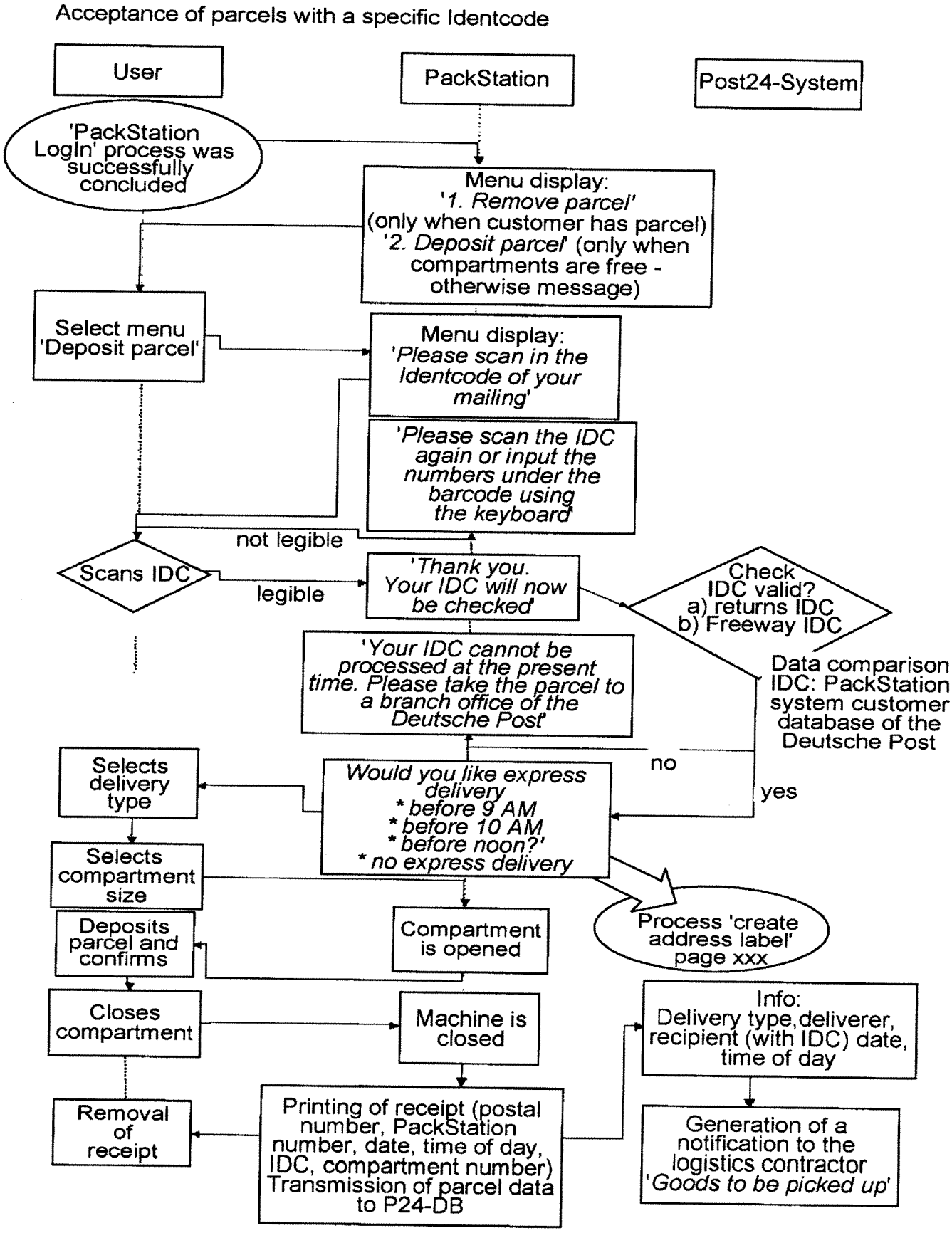
Acceptance of parcels with a specific Identcode
User
PackStation
Post24-System
'PackStation LogIn' process was successfully concluded
Menu display: '1. Remove parcel' (only when customer has parcel) '2. Deposit parcel' (only when compartments are free - otherwise message)
Select menu 'Deposit parcel'
Menu display: 'Please scan in the Identcode of your mailing'
'Please scan the IDC again or input the numbers under the barcode using the keyboard'
not legible
Scans IDC
legible
'Thank you. Your IDC will now be checked'
Check IDC valid? a) returns IDC b) Freeway IDC
Data comparison IDC: PackStation system customer database of the Deutsche Post
'Your IDC cannot be processed at the present time. Please take the parcel to a branch office of the Deutsche Post'
no
yes
Selects delivery type
Would you like express delivery * before 9 AM * before 10 AM * before noon?' * no express delivery
Selects compartment size
Process 'create address label' page xxx
Deposits parcel and confirms
Compartment is opened
Closes compartment
Machine is closed
Info: Delivery type, deliverer, recipient (with IDC) date, time of day
Removal of receipt
Printing of receipt (postal number, PackStation number, date, time of day, IDC, compartment number) Transmission of parcel data to P24-DB
Generation of a notification to the logistics contractor 'Goods to be picked up'

Fig. 2

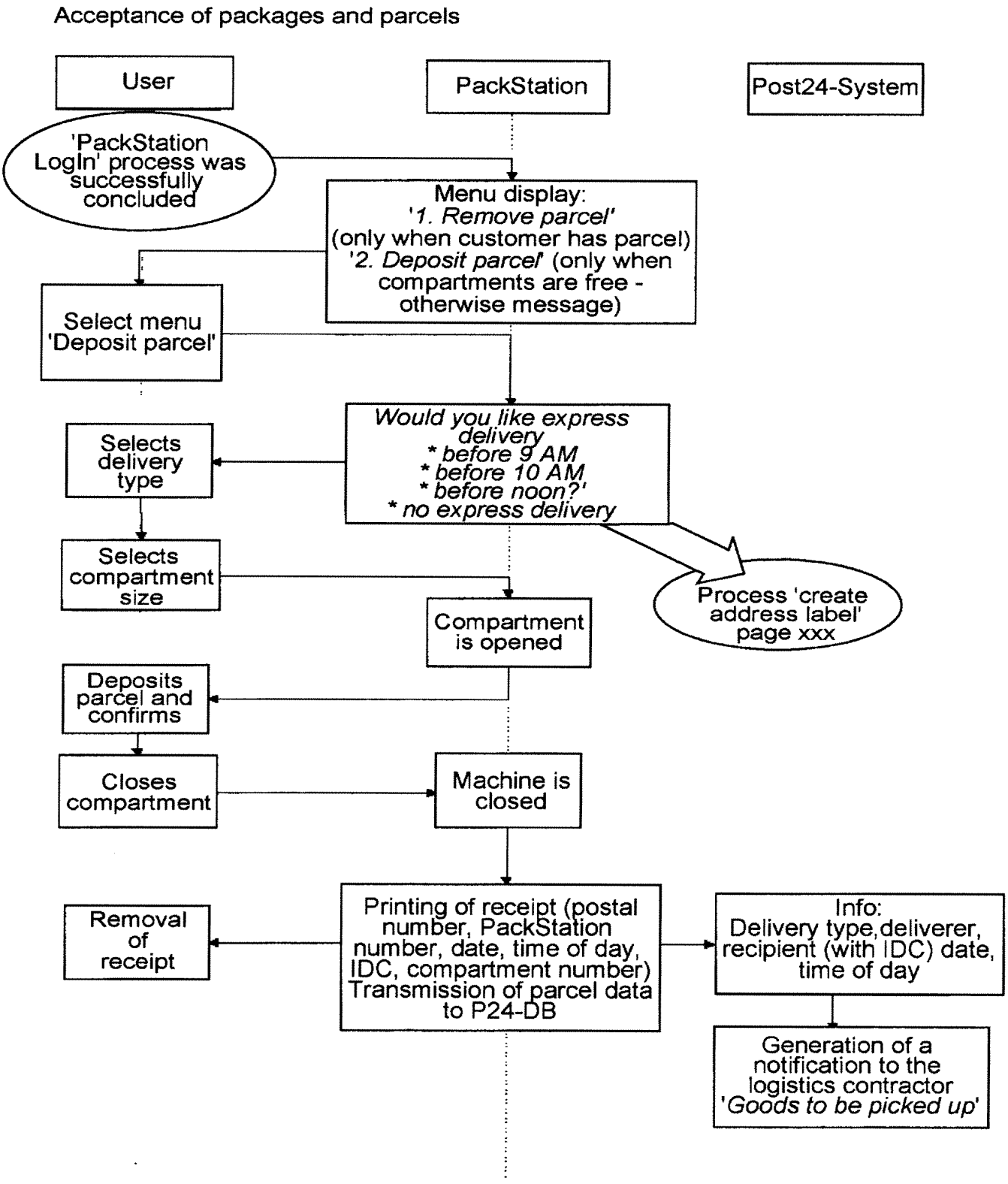
Acceptance of packages and parcels
User
PackStation
Post24-System
'PackStation LogIn' process was successfully concluded
Menu display: '1. Remove parcel' (only when customer has parcel) '2. Deposit parcel' (only when compartments are free - otherwise message)
Select menu 'Deposit parcel'
Would you like express delivery * before 9 AM * before 10 AM * before noon?' * no express delivery
Selects delivery type
Selects compartment size
Process 'create address label' page xxx
Compartment is opened
Deposits parcel and confirms
Closes compartment
Machine is closed
Removal of receipt
Printing of receipt (postal number, PackStation number, date, time of day, IDC, compartment number) Transmission of parcel data to P24-DB
Info: Delivery type, deliverer, recipient (with IDC) date, time of day
Generation of a notification to the logistics contractor 'Goods to be picked up'

Fig. 3